# FEDERALLY ENFORCEABLE STATE OPERATING PERMIT- RENEWAL NESHAP SOURCE

### PERMITTEE

Federal Signal Corporation
Attn: Thomas Longtin
2645 Federal Signal Drive
University Park, Illinois 60466-3195

Applicant's Designation: POWDERCOAT Date Received: March 15, 2001

Subject: Manufacture of Signal Devices

Date Issued: September 19, 2001 Expiration Date: September 19, 2006

Location: 2645 Federal Signal Drive, University Park

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of a vapor degreaser, two natural gas fired boilers, bake ovens, paint booths, powder coating booths with powder filters and reclaim systems, and a humiseal coating operation, pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of hazardous air pollutants (HAPs) from the source to less than major source thresholds, i.e., HAPs to less than 10 tons per year of any single HAP and 25 tons per year of any combination of such HAPs, as further described in Attachment A. As a result, the source is excluded from requirements to obtain a Clean Air Act Permit Program (CAAPP) permit.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit(s) issued for this location.
- 2a. The open top vapor degreaser is subject to 40 CFR Part 63, Subpart T National Emission Standards for Halogenated Solvent Cleaning. The Illinois EPA is administering this regulation in Illinois on behalf of the United States EPA under a delegation agreement. The United States EPA issued this final rule on December 2, 1994.
- b. The Permittee must be in compliance with 40 CFR Part 63, Subpart T -National Emission Standards for Halogenated Solvent Cleaning on or before December 2, 1997.
- c. The degreaser shall comply with the requirements of 35 Ill. Adm. Code 218.183.

3a. Emissions and operation of the vapor degreaser shall not exceed the following limits:

Trichloroeth	nylene Usage	VOM and HAP	Emissions
(Gal/Mo)	(Gal/Yr)	(Ton/Mo)	(Ton/Yr)
129.7	1,557	0.8	9.5

These limits are based on maximum solvent usage and solvent density of 12.2 lbs/gallon. Compliance with annual limits shall be determined from a running total of 12 months of data.

b. Emissions and operation of all non-exempt gas-fired units (combined) shall not exceed the following limits:

Natural Gas	Consumption	
(mmscf/Mo)	(mmscf/Yr)	
15	100	

	Emission Factor	Emissions	
<u>Pollutant</u>	(Lb/mmscf)	(Ton/Mo)	(Ton/Yr)
$NO_x$	100	0.8	5.0
CO	84	0.7	4.2
PM	7.6	0.1	0.4
VOC	5.5	0.1	0.3

These limits are based on maximum gas consumption and standard AP-42 emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

- c. Total emissions of VOM from the paint booths and humiseal coating operation shall not exceed 0.3 tons/month and 2.8 tons/year.
- d. This permit is issued based on negligible emissions of PM from the powder coating booths. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
- 4. The Permittee shall maintain monthly records of the following items:
  - a. Trichloroethylene usage (gal/mo, gal/yr);
  - b. Natural gas consumption (mmscf/mo, mmscf/yr);
  - c. Name, usage, VOM content, and HAP content of all coatings, thinners, and clean-up solvents (gallons, lb/gal, lb;/gal; and
  - d. VOM and HAP emissions (ton/mo, ton/yr).
- 5. For determination of compliance with the limits of this permit, solvent usage in the degreaser shall be determined by the following equation:

## $U = V - (W \times P)$

#### Where:

- U = Solvent usage for compliance determinations (gallons).
- V = Virgin solvent<sup>A</sup> added to the degreasers (gallons), as determined by daily addition log sheets.
- W = Waste solvent<sup>B</sup> removed from the degreasers and sent off-site for reclamation or disposal, as determined by monthly manifests.
- P = Percent concentration of solvent in waste, as determined by analysis/testing<sup>C</sup>.
  - For purposes of this permit, virgin solvent is defined as unused solvent.
  - For purposes of this permit, waste solvent is defined as used solvent.
  - The percent concentration of solvent in waste (P) shall be determined in accordance with USEPA Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW-846), Test Method 8260.
- 6. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least 3 years from the date of entry and shall be made available for inspection and copying by the Agency and USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Agency request for records during the course of a source inspection.
- 7. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Agency's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the record keeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
- 8. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency Division of Air Pollution Control Compliance Section (#40) P.O. Box 19276 Springfield, Illinois 62794-9276

 $\underline{\text{and}}$  one (1) copy shall be sent to the Illinois EPA's regional office at  $\overline{\text{the}}$  following address unless otherwise indicated:

Illinois Environmental Protection Agency Division of Air Pollution Control 9511 West Harrison Des Plaines, Illinois 60016

9. In the event that the operation of this source results in an odor nuisance the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

It should be noted that the 2.0 and 3.5 mmBtu/hour boilers, air makeup units, wave soldering equipment, and cleaning equipment are exempt from state permit requirements, pursuant to 35 Ill. Adm. Code 201.146(d), (d), (y) and (rr), respectively.

If you have any questions on this, please call Jim Kallmeyer at 217/782-2113.

Donald E. Sutton, P.E. Manager, Permit Section Division of Air Pollution Control

DES:JDK:jar

cc: Illinois EPA, FOS Region 1
 Illinois EPA, Compliance Section
 Lotus Notes

# Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from the manufacturing facility operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Agency used the annual operating scenario which results in maximum emissions from such plant. The resulting maximum emissions are well below the levels, e.g., 25 tons per year of VOM, 10 tons per year of a single HAP, and 25 tons per year of combined HAPs at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

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